



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,534	09/13/2005	Hubert Hauser	263605US6PCT	9522
22850 7590 04/10/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER PARKER, FREDERICK JOHN				
ART UNIT 1792		PAPER NUMBER		
NOTIFICATION DATE 04/10/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HUBERT HAUSER, HERBERT STADELMANN,
and ANDREAS KASPER

Appeal 2009-1284
Application 10/518,534
Technology Center 1700

Decided:¹ April 8, 2009

Before TERRY J. OWENS, MARK NAGUMO, and
JEFFREY B. ROBERSTON, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 18-22, 24-29, and 35, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the Decided Date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

The Invention

The Appellants claim a method for marking tempered glass panes which are then heat treated. Claims 18 and 35 are illustrative:

18. A method for visual marking glass panes tempered and then heat-treated, the method comprising:

modifying a marking layer deposited on a surface of a tempered glass pane, that visually indicates that the heat treatment has been carried out by producing a marking field with an uneven surface structure on the surface of the tempered glass pane, the surface of the marking field having a surface structure and adhesively bonding the marking layer via heat treatment to the surface of the tempered glass pane such that the marking layer deposited on the glass pane is permanently bonded to the marking field wherein the color of the marking layer is thereby irreversibly modified by the heat treatment, and wherein the marking field configured for depositing the marking layer is produced on a smooth surface of the tempered glass pane.

35. A method for visual marking glass panes tempered and then submitted to a heat-soak test, with marking layer that visually indicates that the heat-soak-test has been carried out, the method comprising:

producing before the heat-soak-test at the surface of the smooth glass pane a marking field comprising an uneven surface structure, and

depositing, after the tempering, a marking color on said marking field for producing the marking layer, wherein the marking color fills said uneven surface structure.

The Reference

Dauba 6,430,964 B1 Aug. 13, 2002

The Rejections

The claims stand rejected over Dauba as follows: claims 18, 20-22, 26-28, and 35 under 35 U.S.C. § 102(b), and claims 18-22, 24-29, and 35 under 35 U.S.C. § 103.

OPINION

We affirm the Examiner's rejections.

The Appellants argue only the independent claims, i.e., claims 18 and 35 (Br. 4-7). We therefore limit our discussion to those claims. Claims 20-22 and 26-28 stand or fall with claim 18 from which they depend. *See* 37 C.F.R. § 41.37(c)(1)(vii) (2007).

Claim 18

Issue

Have the Appellants shown reversible error in the Examiner's determination that Dauba discloses, expressly or inherently, or would have rendered prima facie obvious, to one of ordinary skill in the art, (1) producing a marking field with an uneven surface structure on a smooth surface of a tempered glass pane; or (2) adhesively bonding a marking layer to the marking field via heat treatment such that the color of the marking layer is irreversibly modified by the heat treatment and the marking layer is permanently bonded to the marking field?

Findings of Fact

Dauba discloses a method for identifying glazing that has undergone heat treatment such as a heat soak test (col. 1, ll. 4-5, 9-12). "The term 'glazing' encompasses single or multiple glass panes, these being bare or coated with thin films, such as pyrolytic films, or with thick films, such as enamels" (col. 1, ll. 5-8). A marking substance, which preferably is a curable ink (col. 4, ll. 22-24), "may be fixed either on the glass or on the film" (col. 2, ll. 57-59). During the heat treatment, the ink, which initially was yellow, turns brown (col. 5, ll. 19-20). The method "permits, under the

normal handling, and storage conditions, [t]he glazing that has undergone the said heat treatment to be indelibly marked” (col. 3, ll. 6-8).

Analysis

“Anticipation requires that every limitation of the claim in issue be disclosed, either expressly or under principles of inherency, in a single prior art reference.” *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1255-56 (Fed. Cir. 1989).

As stated in *KSR Int’l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007), rejections on obviousness grounds require “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

The Examiner initially indicates that he considers Dauba’s glaze to correspond to the Appellants’ marking field (Ans. 3). The Examiner’s subsequent arguments, however, clarify that the Examiner considers Dauba’s film material on the glass to correspond to the Appellants’ marking field, i.e., “the film material to which the marking is applied results in the glass being ‘indelibly marked’ (col. 3, 8) ... the marking material is applied to a film given sufficient porosity/roughness to be suitable for imparting the indelible properties cited by the reference” (Ans. 4), and “it is the Examiner’s position that the marking material is applied to a film with sufficient porosity/roughness to be suitable for imparting the indelible properties cited by the reference” (Ans. 6).

The Appellants argue that “Dauba et al. contains no teaching of any marking field having an ‘uneven surface’ as claimed in claim 18” (Reply Br. 2).

The Examiner finds that Dauba's glass pane is inherently smooth and that Dauba's film which is marked inherently possesses a coarser, less smooth and more grainy surface than glass (Ans. 3, 6).

The Appellants do not specifically challenge the Examiner's findings. The Appellants point out that Dauba discloses that the glazing can be bare or coated glass (Br. 5), but the Appellants do not challenge the Examiner's finding that the surface of Dauba's coating film inherently is coarser, less smooth and more grainy than glass and, therefore, corresponds to the Appellants' marking field having an uneven surface structure. Indeed, the Examiner's finding that Dauba's film inherently possesses a coarser, less smooth and more grainy surface than glass (Ans. 3, 6) appears to be supported by the Appellants' disclosure that deposition of an additional surface structure in the form of a coating to be baked, in particular during the heat tempering, forms a marking field having "a surface that is finely porous or also appropriately structured, to which a marking color, on the one hand, adheres well" (Spec. 4:33-38). The Appellants also do not challenge the Examiner's finding that Dauba's glass on which the film is applied is inherently smooth. Consequently, we accept for this Opinion the Examiner's unchallenged findings as fact. See *In re Kunzmann*, 326 F.2d 424, 425 n.3 (CCPA 1964).

The Appellants argue that the indelible nature of Dauba's marking is limited to normal handling, so the marking is not permanently bonded as required by the Appellants' claim 18 (Br. 4-5; Reply Br. 1-2).

"[D]uring examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification." *In re Translogic*

Tech. Inc., 504 F.3d 1249, 1256 (Fed. Cir. 2007), quoting *In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000).

The Appellants' Specification states (Spec. 6:11-19):

Because of the intimate bonding between the marking layer and the structured surface of the subadjacent marking field, it is consequently no longer possible to completely remove the color with a glass plane, a blade or other tools. Even by rubbing strongly with glass wool, residues of color could still be identified using a microscope. Likewise, it is still possible to determine without any problem, by analysis, what color was employed.

The Examiner states that "he previously challenged Applicants to provide a convincing showing that the claimed marking cannot be removed, e.g. by HF or other acid etching, by a steel blade or chipping by a chisel, by grinding and other conventional means" (Ans. 5).

The Appellants have not specifically responded to the Examiner's argument. Moreover, the Appellants' Specification states (Spec. 6:21-26):

Nevertheless, if an unauthorized attempt was made to remove the marking in addition to the baked coating or the applied surface structure, this would in all cases leave clear traces on the surface of the substrate, which would make one suspect that the substrate in question had been manipulated.

That disclosure is supportive of the Examiner's implicit argument that even if the Appellants' marking cannot be removed by the particular techniques mentioned in the Appellants' Specification, it can be removed by other techniques.

Thus, the broadest reasonable interpretation, in view of the Appellants' Specification, of "permanently bonded" in the Appellants' claim 18 is that the marking is bonded in some, but not all, environments.

Because Dauba's marking is indelible under normal handling and storage conditions (col. 2, ll. 50-51; col. 3, ll. 5-8), it is permanently bonded in those environments and, therefore, is encompassed by the Appellants' claim 18.

In response to the Examiner's argument that it would have been obvious to one of ordinary skill in the art to carry out Dauba's method using "a film surface of sufficient structure to allow strong adherence to[/]of the marking material to cause it to be 'indelibly marked' and 'without risk of the ink being removed during handling operations'" (Ans. 4), the Appellants argue that such a modification would destroy Dauba for its intended purpose which, the Appellants assert, is permitting removal of a marking under conditions other than normal handling and storage, i.e., at high temperatures (Br. 5, 6).

The Appellants' argument pertains to Dauba's disclosure that, according to one variant, the marking can be removed at temperatures above approximately 330 °C (col. 3, l. 62 – col. 4, l. 14). Dauba does not want a glazing to be marked when the heat treatment temperature gets that high because at such a high temperature the transformation of the α phase to the β phase does not occur properly (col. 4, ll. 6-14). Because Dauba's disclosed heat treatment temperature range of 270-330 °C (col. 4, ll. 31-33) is within the Appellants' disclosed range of 180-340 °C (Spec. 1:27-30; Claim 29), it appears that Dauba's marking is "permanently bonded" and has a color that is "irreversibly modified" as those terms are used by the Appellants. In view of the Appellants' indication that their marking loses all adhesion to the glass surface at temperatures substantially above 300 °C (Spec. 2:32-37), it appears the Appellants' claimed method is not distinguished over Dauba's method as a result of Dauba's marking being

removable at temperatures above the heat treatment temperature range because the Appellants' marking also is removable at such temperatures.

Conclusion of Law

The Appellants have not shown reversible error in the Examiner's determination that Dauba discloses, expressly or inherently, producing a marking field with an uneven surface structure on a smooth surface of a tempered glass pane, and adhesively bonding a marking layer to the marking field via heat treatment such that the color of the marking layer is irreversibly modified by the heat treatment and the marking layer is permanently bonded to the marking field.

Claim 35

Issue

Have the Appellants shown reversible error in the Examiner's determination that Dauba discloses, expressly or inherently, or would have rendered prima facie obvious, to one of ordinary skill in the art, providing a smooth glass pane with a marking field having an uneven structure, and filling the uneven surfaces with a colored marking?

Analysis

The Appellants argue that Dauba does not disclose or suggest providing a marking field with an uneven surface structure (Br. 7).

That argument is not persuasive for the reason given above regarding the rejection of claim 18.

The Appellants argue that Dauba does not disclose or suggest filling an uneven surface structure with a marking color (Br. 7).

The Examiner argues that “the glaze [i.e., film] of Dauba, necessarily being rougher/uneven compared to a smooth glass pane surface, would also receive the marking substance so it fills the glaze surface” (Ans. 7).

The Appellants do not address the Examiner’s argument and explain why it is incorrect. Consequently, we are not persuaded of reversible error in that argument.

Conclusion of Law

The Appellants have not shown reversible error in the Examiner’s determination that Dauba discloses, expressly or inherently, or would have rendered prima facie obvious, to one of ordinary skill in the art, providing a smooth glass pane with a marking field having an uneven structure, and filling the uneven surfaces with a colored marking.

DECISION/ORDER

The rejections over Dauba of claims 18, 20-22, 26-28, and 35 under 35 U.S.C. § 102(b), and claims 18-22, 24-29, and 35 under 35 U.S.C. § 103 are affirmed.

It is ordered that the Examiner’s decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

Appeal 2009-1284
Application 10/518,534

PL Initial:
sld

OBLON, SPIVAK, MCCLELLAND, MAIER
& NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314